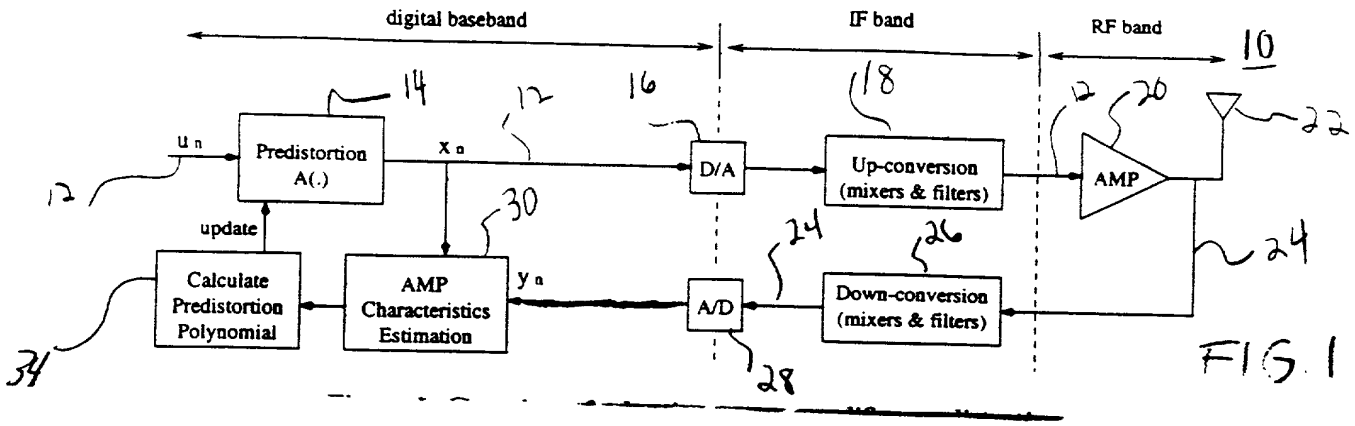
digital baseband
IF band
RF band
10
14
12
16
18
20
22
$u_n$
Predistortion A(.)
$x_n$
D/A
Up-conversion (mixers & filters)
AMP
update
30
24
26
Calculate Predistortion Polynomial
AMP Characteristics Estimation
$y_n$
A/D
Down-conversion (mixers & filters)
34
28

FIG. 1

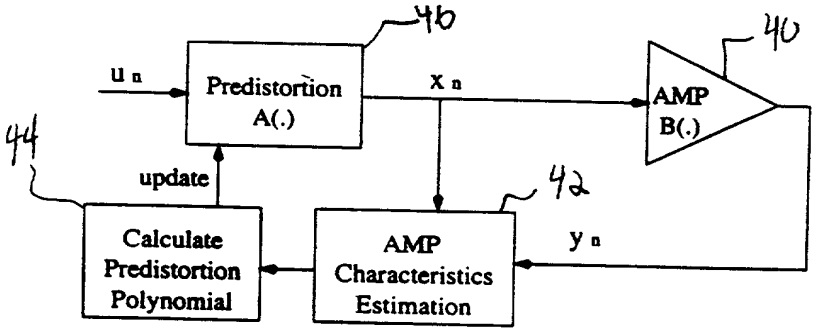
46
40
$u_n$
Predistortion A(.)
$x_n$
AMP B(.)
44
update
42
Calculate Predistortion Polynomial
AMP Characteristics Estimation
$y_n$

FIG. 2

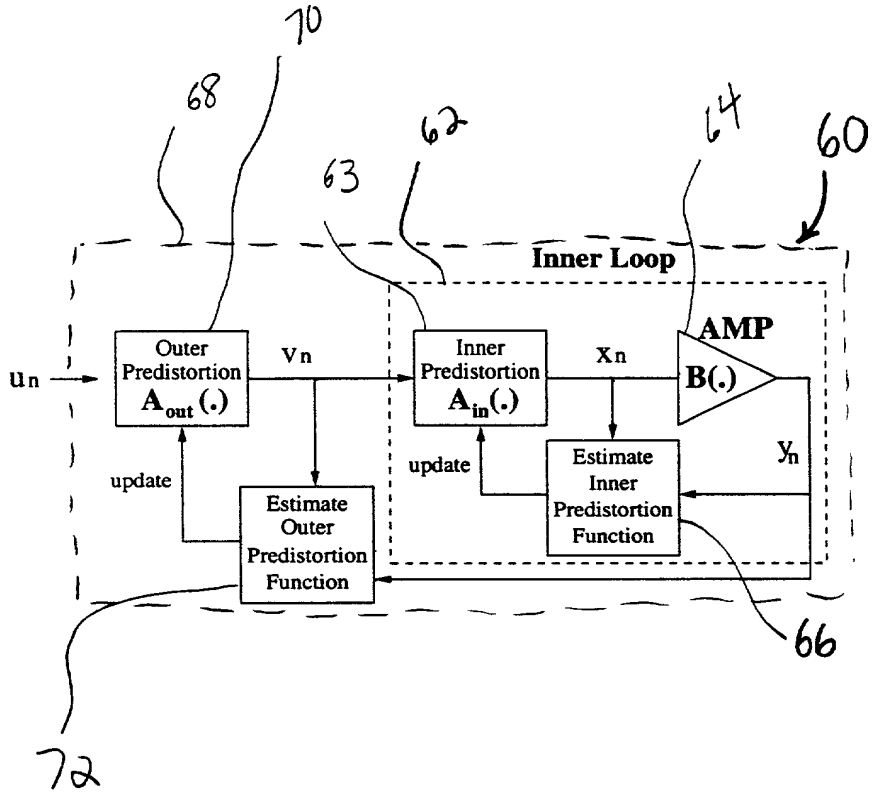
70
68
62
64
60
63
Inner Loop
AMP
Outer Predistortion $A_{out}(.)$
Vn
Inner Predistortion $A_{in}(.)$
Xn
B(.)
un
update
update
Estimate Outer Predistortion Function
Estimate Inner Predistortion Function
yn
66
72

FIG. 3